

WHAT IS CLAIMED IS:

1. An aqueous coating composition having improved adhesion to friable surfaces comprising an emulsion polymer having a glass transition temperature of -20 C to 100 C and an average particle diameter less than 120 nanometers, said emulsion polymer consisting essentially of at least one copolymerized ethylenically unsaturated nonionic monomer, each of said nonionic monomer(s) having a water solubility less than 8%, and at least one copolymerized acid monomer, such that the acid number of said emulsion polymer is 30 to 100; and 0.25-10%, by weight based on said emulsion polymer weight, water-soluble alkoxylated amine.
2. The coating composition of claim 1 wherein the acid number of said emulsion polymer is 39 to 50.
3. The coating composition of claim 1 wherein the average particle diameter of said emulsion polymer is less than 80 nanometers.
4. An aqueous coating composition having improved adhesion to friable surfaces comprising an emulsion polymer having a glass transition temperature of -20 C to 100 C and an average particle diameter less than 120 nanometers, said emulsion polymer consisting essentially of 8-99.5 %, by weight based on said emulsion polymer weight, of at least one copolymerized ethylenically unsaturated first nonionic monomer, each of said first nonionic monomer(s) having a water solubility of 8% or more, 0-91.5 %, by weight based on said emulsion polymer weight, of at least one copolymerized ethylenically unsaturated second nonionic monomer, each of said second nonionic monomer(s) having a water solubility of less than 8%, and at least one copolymerized acid monomer, such that the acid number of said emulsion polymer is 4 to 100; and 0.25-10%, by weight based on said emulsion polymer weight, water-soluble alkoxylated amine.
5. The coating composition of claim 4 wherein the average particle diameter of said emulsion polymer is less than 80 nanometers.
6. A method for improving the adhesion of a dried aqueous coating composition to a friable surface comprising

forming an aqueous coating composition comprising an emulsion polymer having a glass transition temperature of -20 C to 100 C and an average particle diameter less than 120 nanometers, said emulsion polymer consisting essentially of at least one copolymerized ethylenically unsaturated nonionic monomer, each of said nonionic monomer(s) having a water solubility less than 8%, and at least one copolymerized acid monomer, such that the acid number of said emulsion polymer is 30 to 100, and 0.5-10%, by weight based on said emulsion polymer weight, water-soluble alkoxyated amine;

applying said aqueous coating composition to a surface; and

drying, or allowing to dry, said aqueous coating composition.

7. The method of claim 6 wherein the acid number of said emulsion polymer is 39 to 50.

8. The method of claim 6 wherein the average particle diameter of said emulsion polymer is less than 80 nanometers.

9. A method for improving the adhesion of a dried aqueous coating composition to a friable surface comprising

forming an aqueous coating composition comprising an emulsion polymer having a glass transition temperature of -20 C to 100 C and an average particle diameter less than 120 nanometers, said emulsion polymer consisting essentially of 8-99.5 %, by weight based on said emulsion polymer weight, of at least one copolymerized ethylenically unsaturated first nonionic monomer, each of said first nonionic monomer(s) having a water solubility of 8% or more, 0-91.5 %, by weight based on said emulsion polymer weight, of at least one copolymerized ethylenically unsaturated second nonionic monomer, each of said second nonionic monomer(s) having a water solubility of less than 8%, and at least one copolymerized acid monomer, such that the acid number of said emulsion polymer is 4 to 100; and 0.5-10%, by weight based on said emulsion polymer weight, water-soluble alkoxyated amine,

applying said aqueous coating composition to a surface; and

drying, or allowing to dry, said aqueous coating composition.

10. The method of claim 9 wherein the average particle diameter of said emulsion polymer is less than 80 nanometers.